# Relicensing Study – R15 Recreation Suitability Analysis

Work Group Presentation February 2004

#### Introduction

- Need for the Study / Objective
- Methodology
- Results



#### Need for Study / Study Objective

- FERC requires a comprehensive recreation plan. This study supports this plan by highlighting potential areas where recreation development may occur, if needed.
- The objective is to determine areas likely suitable for potential new recreation facility development.
- This study does not replace on the ground facility siting.

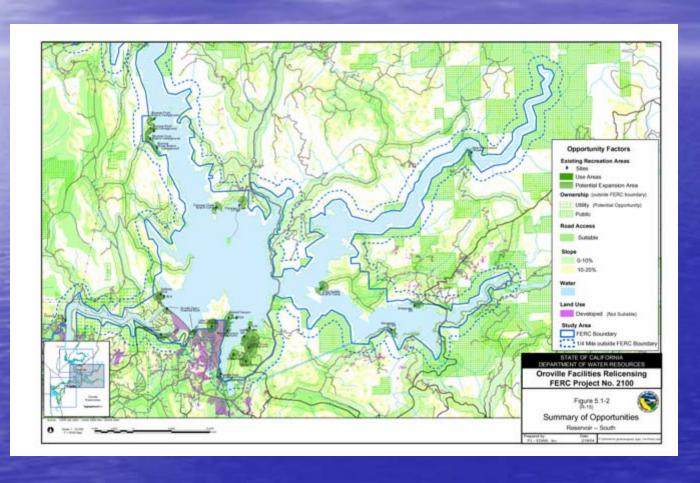
## Methodology

- GIS-based analysis.
- Acquire or create GIS data layers.
- Develop "Summary of Opportunities" Maps.
- Develop "Summary of Constraints" Maps.
- Develop Composite Suitability Maps.
- Areas excluded from the analysis include Project Operations and inundated areas – 49% of the area within FERC boundary.

## Methodology (Summary of Opportunities)

- The following factors were considered opportunities and were included on the opportunity maps:
  - Proximity to Existing Recreation Sites (Potential for infill and expansion);
  - · Land within FERC boundary;
  - Most Favorable slope (10% or less);
  - Public Land Ownership; and
  - · Proximity to Existing Roads.

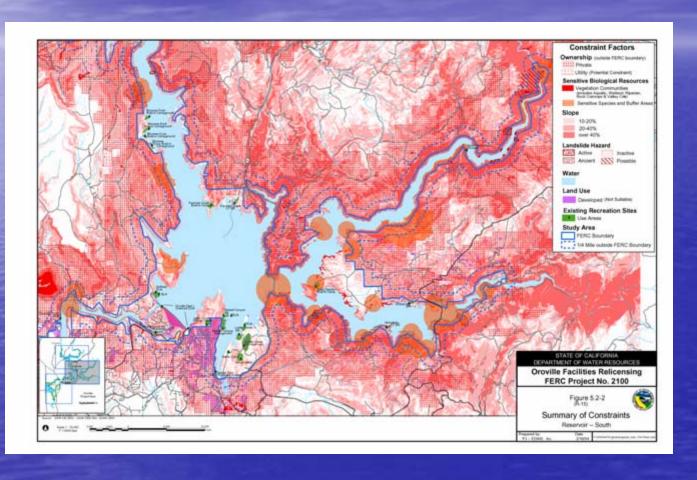
## Summary of Opportunities



## Methodology (Summary of Constraints)

- The following factors were considered constraints and were included on the constraint maps:
  - Moderate (10-20%) to extreme slope (greater than 20%);
  - · Landslide areas;
  - Private land ownership;
  - Sensitive species (state, federal); and
  - Sensitive vegetation communities (includes wetlands and riparian areas).

# Summary of Constraints



## Methodology – High Suitability

- High suitability areas must have the following characteristics:
  - Favorable road access (proximity to existing roads);
  - Publicly owned land;
  - Inside FERC boundary (OR) a Project recreation site;
    and
  - Favorable slope.

#### Methodology – Low Suitability

- An area is defined as Low Suitability if one of the following characteristics is present:
  - Steeper slopes greater than 20%;
  - Privately owned (non-utility) land;
  - Active or possible landslide areas; or
  - Sensitive species (plant and animal) area and buffer.

# Methodology – Composite Suitability

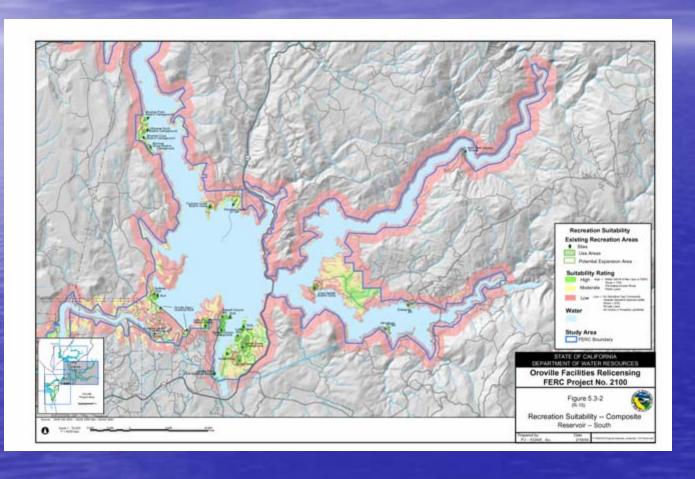
- An area CANNOT be Highly Suitable (but MAY still be moderate) if one or more of the following characteristics are present:
  - Sensitive vegetation community;
  - Privately owned utility land;
  - Inactive / ancient landslides present; or
  - Moderate slope 10-20 percent.

### Results – Inside FERC boundary

- High Suitability 8% of the study area
   (15.0 % of non-excluded areas)
- Moderate Suitability 9% (18%)
- Low Suitability 34% (67%)



## Composite Suitability



#### Cultural Resources

- Cultural Resources were evaluated outside of the GIS composite suitability analysis. Low density cultural resource areas may still have some sensitive resources, and it is possible that high density cultural resource areas do not.
- Additional cultural resource clearances may be required on a site-by-site basis in the future.

### Results – Entire Study Area

- High Suitability 7%
- Moderate Suitability 11%
- Low Suitability 82%
- Excluded Areas (not included)

# Some of the More Likely Highly Suitable Areas

- Lands near Lime Saddle;
- Lands near Spillway DUA and Boat Ramp;
- Lands near Loafer Creek and Bidwell Canyon facilities;
- Lands near the west end of the Diversion Pool; and
- Lands adjacent to the North and South Thermalito Forebay recreation facilities.

